

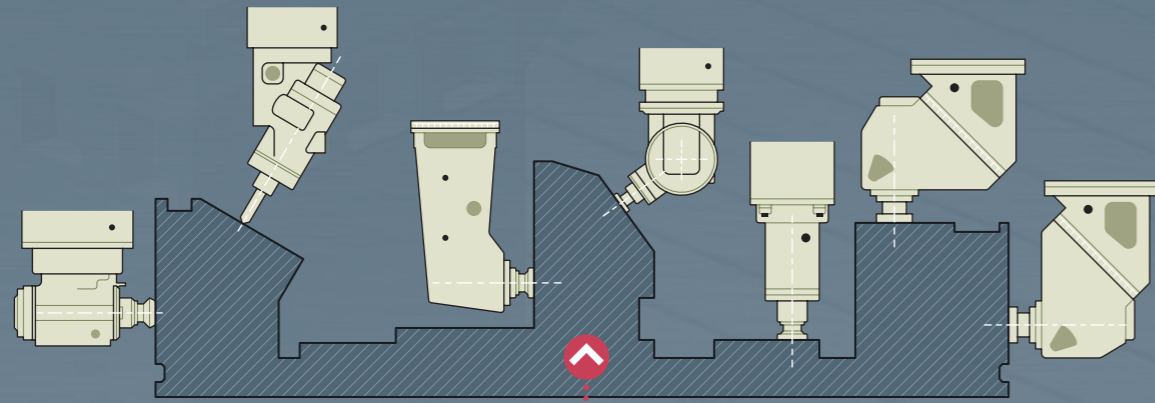


# FOUR-STAR

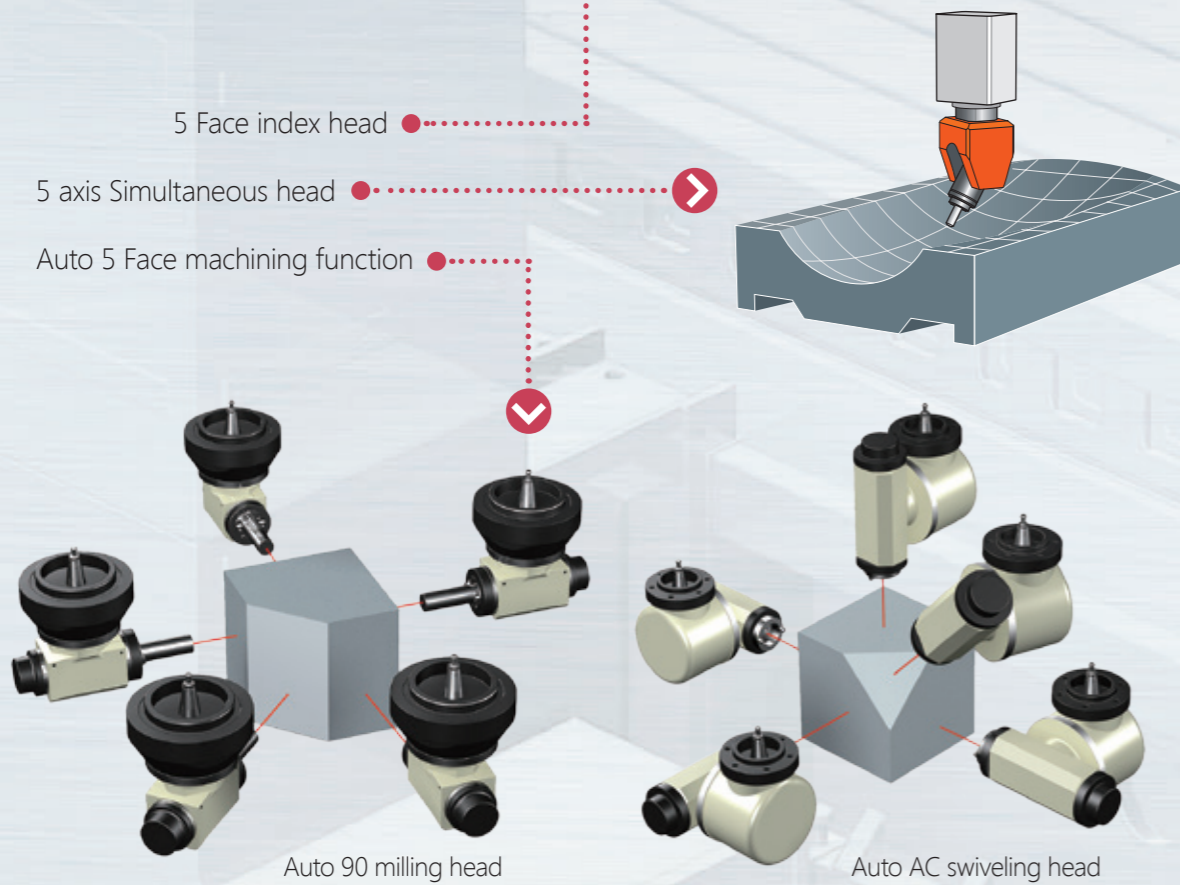
Quality, Credit, Innovation, Service

# FOUR-STAR

www.fourstarcnc.com



## CNC SLIDING DOUBLE COLUMNS MACHINING CENTER



### SD&SDW series



**YONG JU PRECISION TECHNOLOGY CO.,LTD.**

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**YONG JU PRECISION TECHNOLOGY CO.,LTD.**

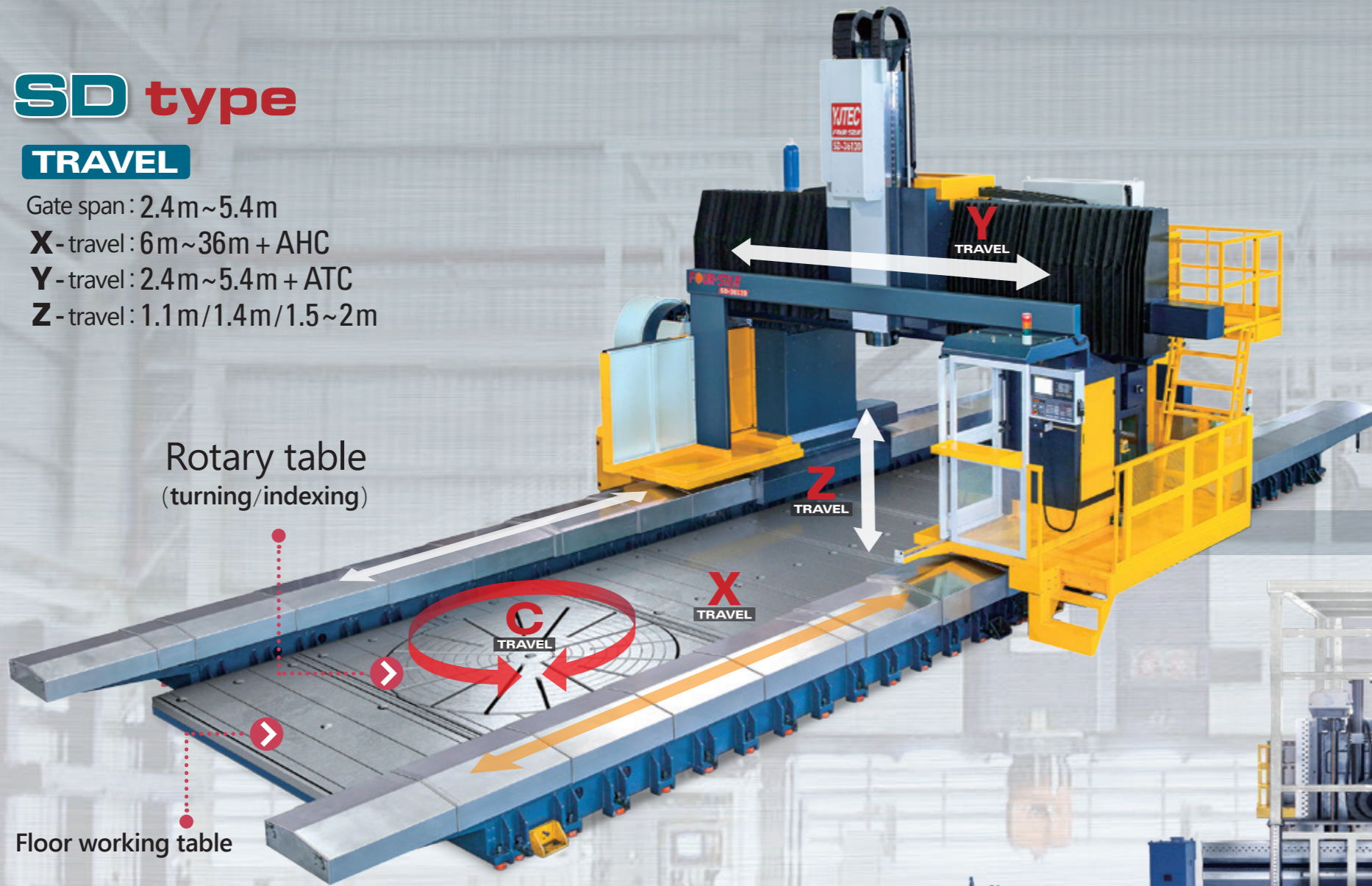
Total Solution Double Column Machining Center Manufacturer

2013.JULY

**SD type**

**TRAVEL**

- Gate span : 2.4m~5.4m
- X-travel : 6m~36m + AHC
- Y-travel : 2.4m~5.4m + ATC
- Z-travel : 1.1m/1.4m/1.5~2m

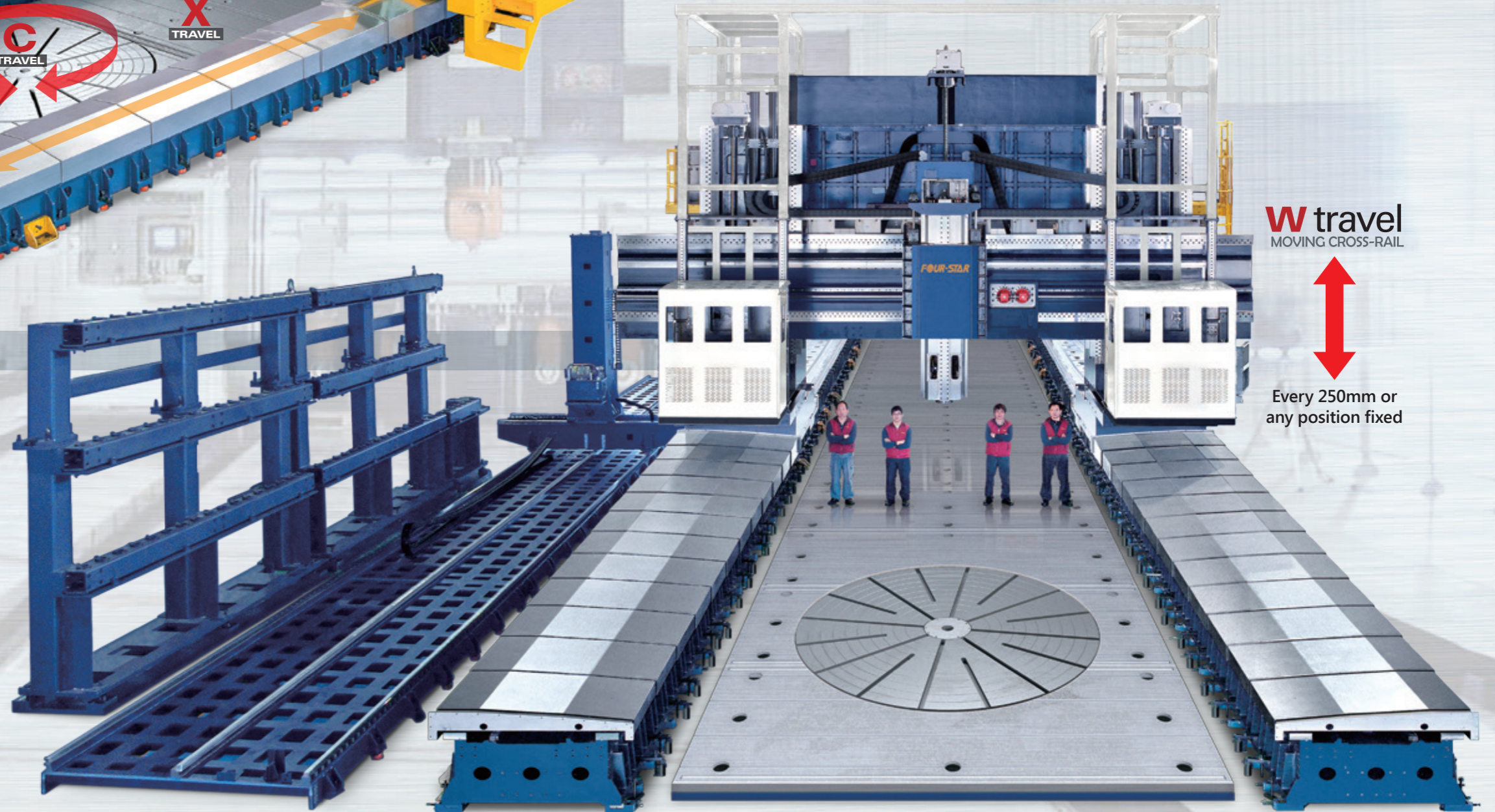


**Order Made**

**SDW type**

**TRAVEL**

- Gate span : 2.4m~5.4m
- X-travel : 6m~36m + AHC
- Y-travel : 2.4m~5.4m + ATC
- Z-travel : 1.1m/1.4m/1.5~2m
- W-travel : 1.5m/2.0m/2.5m



# HRP HIGH RAPID PRECISION MACHINING CENTER



## Model explain

**HRP - 1390 - 2G**

2 Gates

X travel : 9m

Y travel : 1.3m

High Rapid Precision



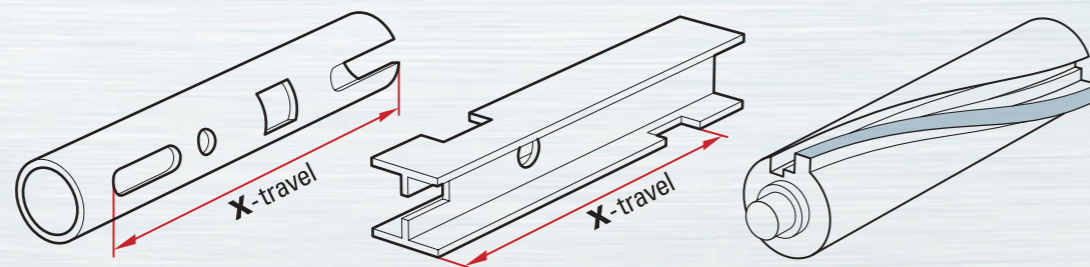
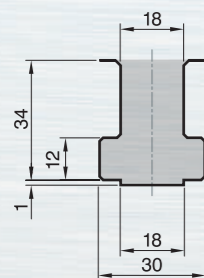
▲ Single Gate model

Gate one piece casting ▶



◀ Table and Base one piece casting

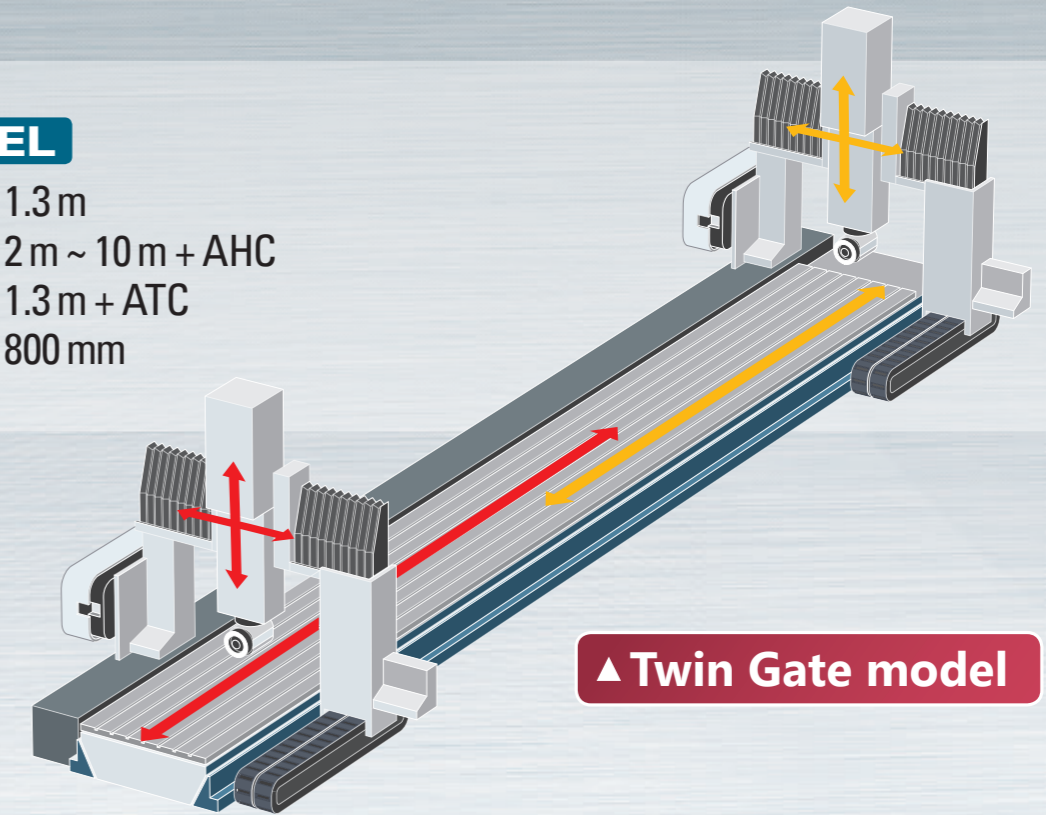
## HRP T Slot



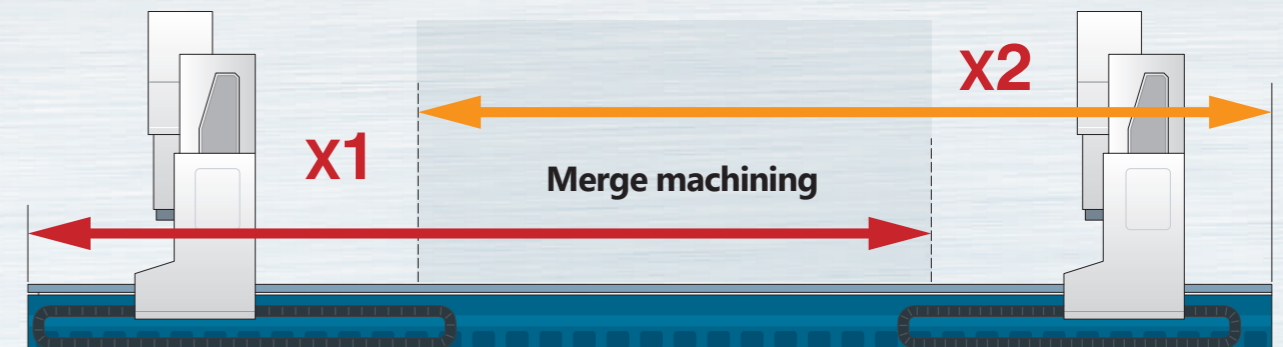
▲ Long size complex precision machining

## TRAVEL

Gate span : 1.3 m  
**X**-travel : 2 m ~ 10 m + AHC  
**Y**-travel : 1.3 m + ATC  
**Z**-travel : 800 mm



▲ Twin Gate model

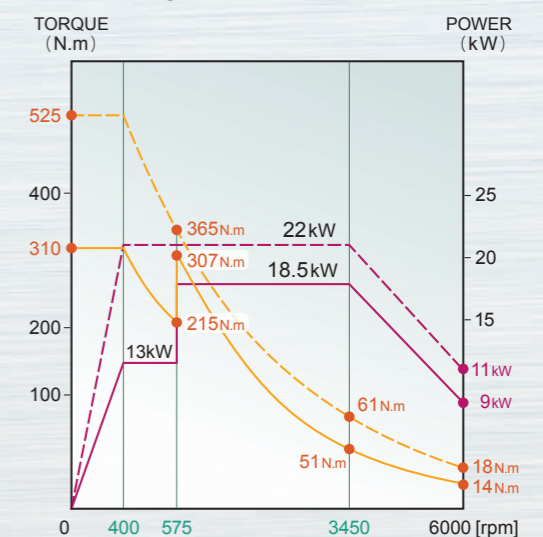


## Power Capability (FANUC system)

### High speed motor α22/10000rpm



### Wide range motor αp40/6000rpm



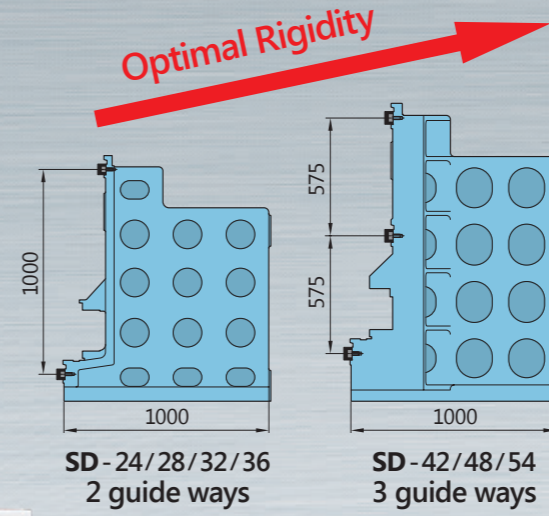
# SD SLIDING DOUBLE COLUMNS MACHINING CENTER



## Structural Design

### SPINDLE BOX (RAM)

- Section size 400x450mm (550x550, 650x650)
- Roller guideway 2 ways (4 ways)
- High rigidity casting frame



### CROSS RAIL (BEAM)

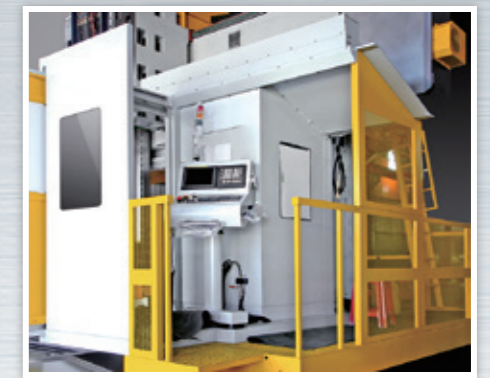
- Box in box unity casting frame
- Optimum bending section modulus
- Optimum rigidity & damping design



Mobile ATC system



X travel by gear-rack syn-servo control



Mobile control room



Column & Slider one piece casting



Auto Head exChanger (AHC)

### Model explain

SD-42 90-5F

Auto 5 Face milling  
Y travel + 650mm

X travel 9m

Gate span 4.2m

Sliding Double Columns

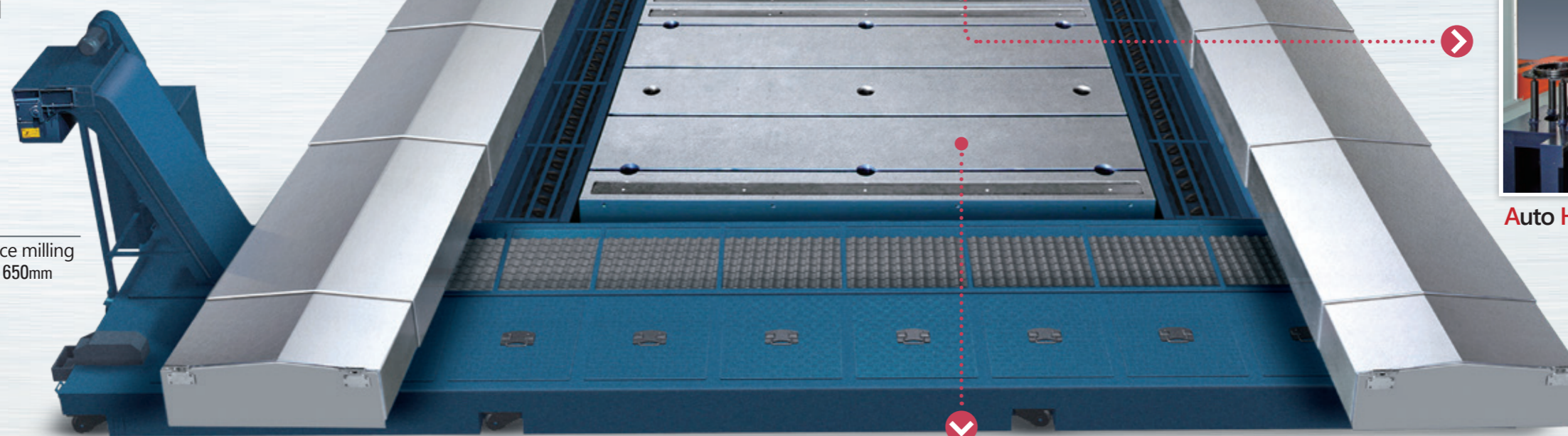


Table height based on customer specified

# SDW SLIDING DOUBLE COLUMNS MACHINING CENTER

**W-type**  
Order Made



Model explain

**SDW - 48 220**

X travel : 22m

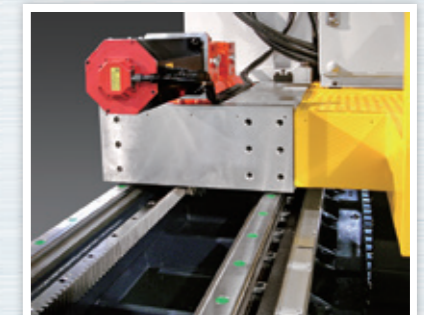
Gate span 4.8m

W type Moving Cross-Rail

Sliding Double Columns



**Patent**  
Cross-Rail one piece casting



▲ X travel by gear-rack syn-servo control

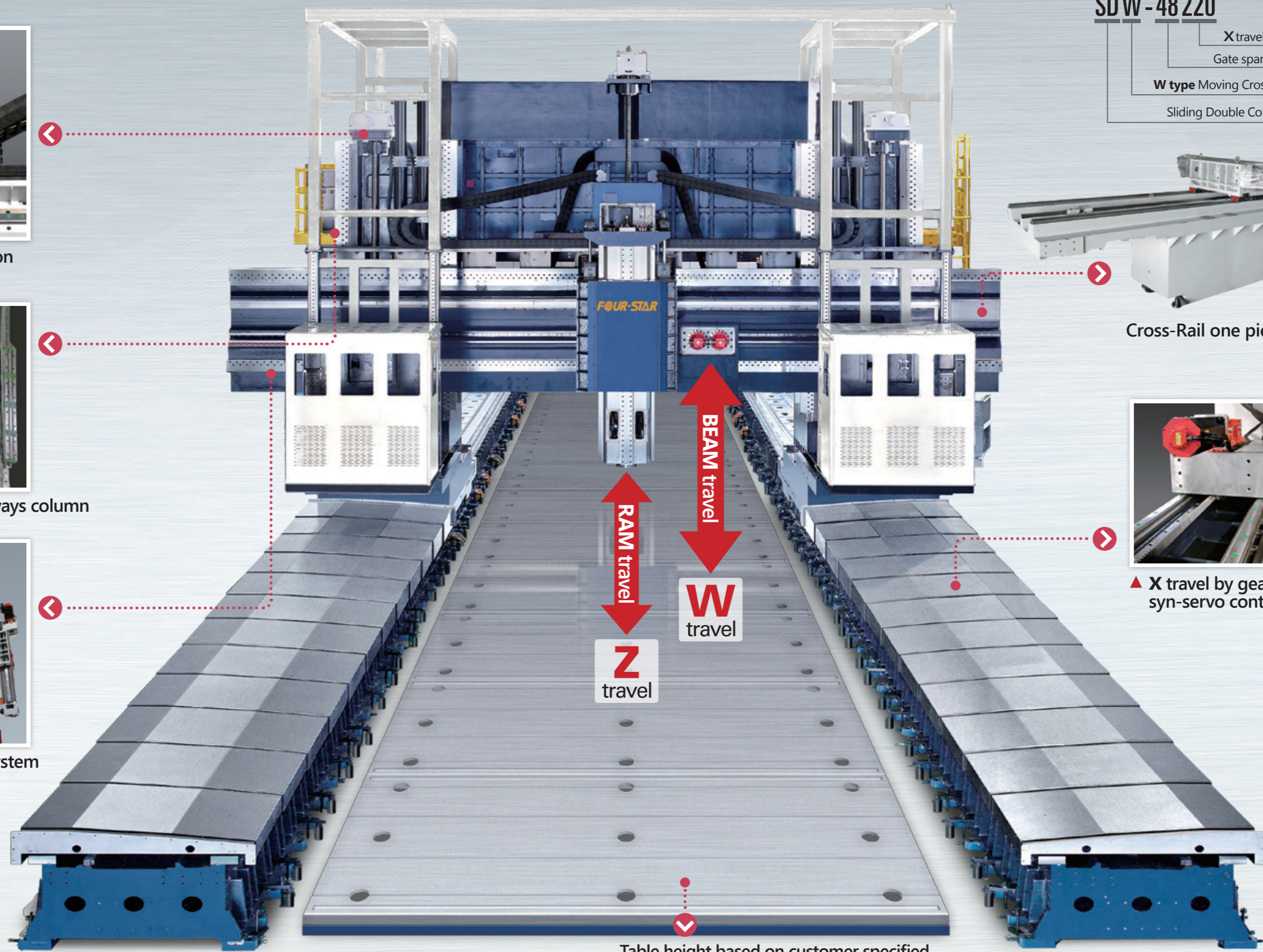
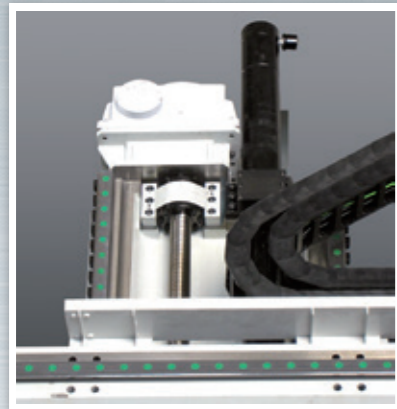


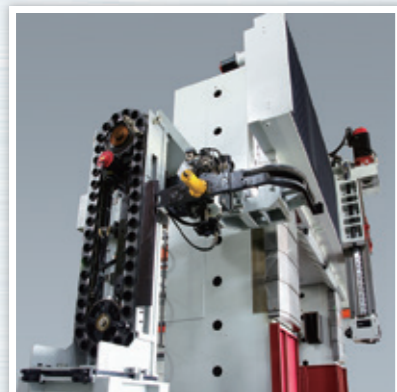
Table height based on customer specified



▲ W travel free-position syn-servo control

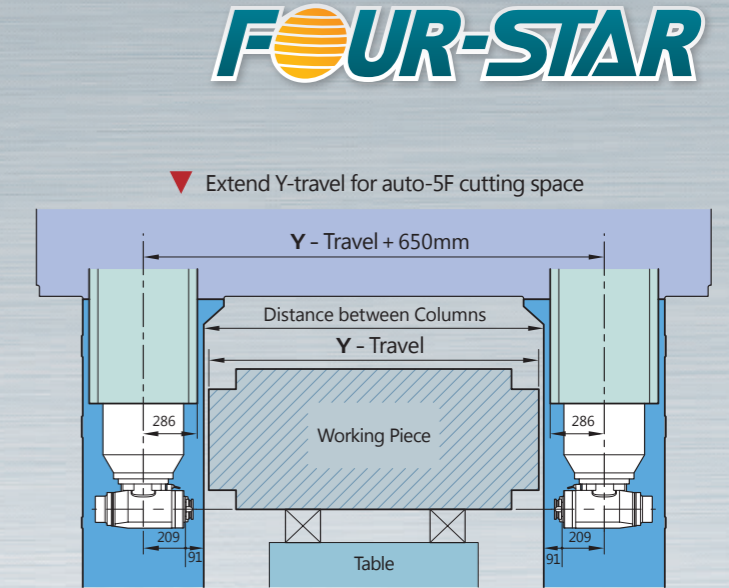
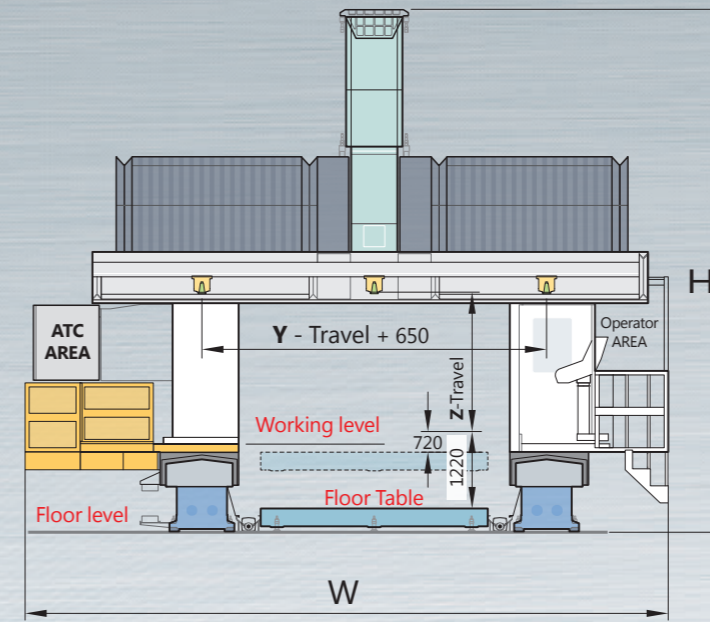
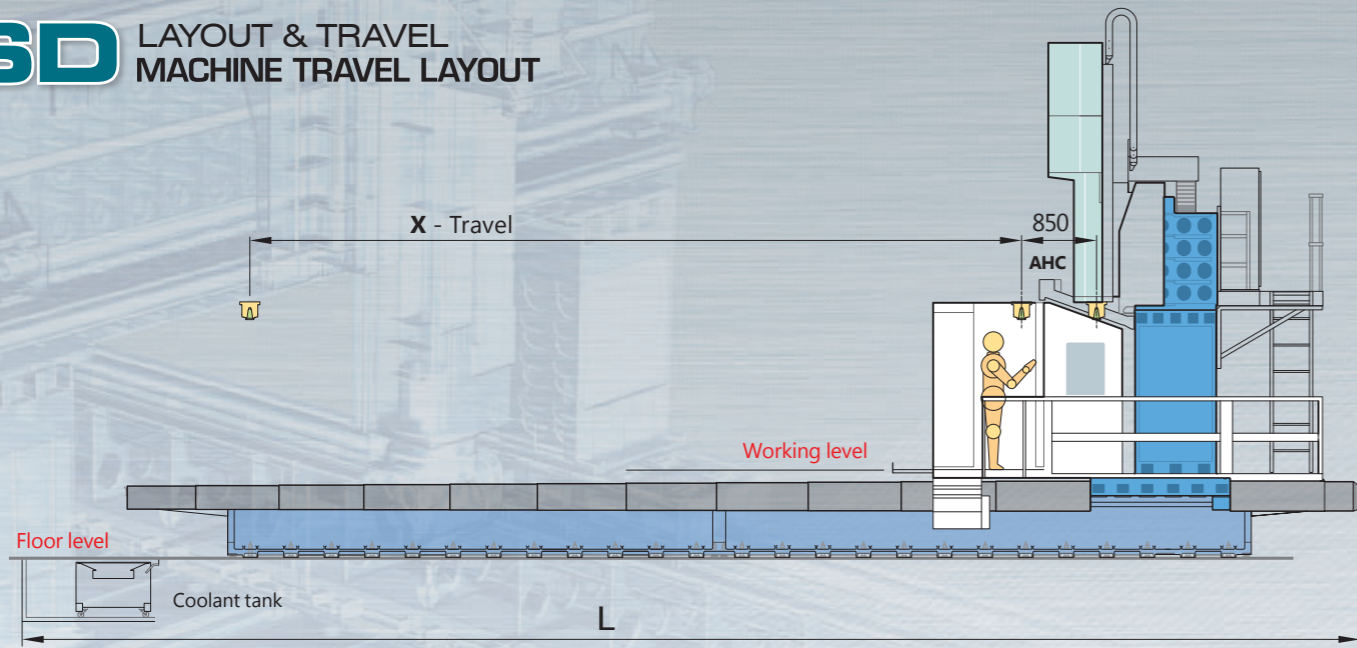


▲ Three linear guide ways column



▲ Free position ATC system

# SD LAYOUT & TRAVEL MACHINE TRAVEL LAYOUT

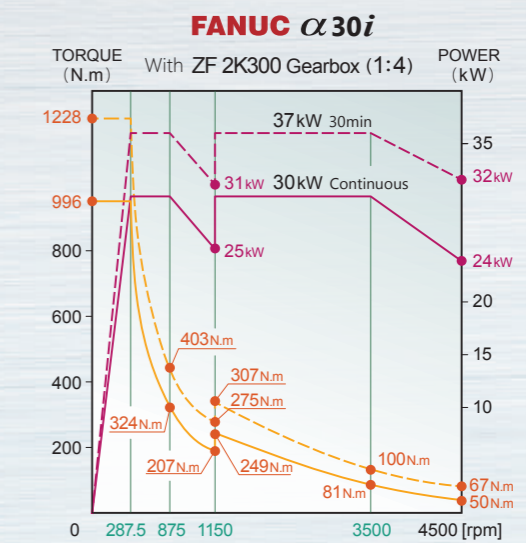
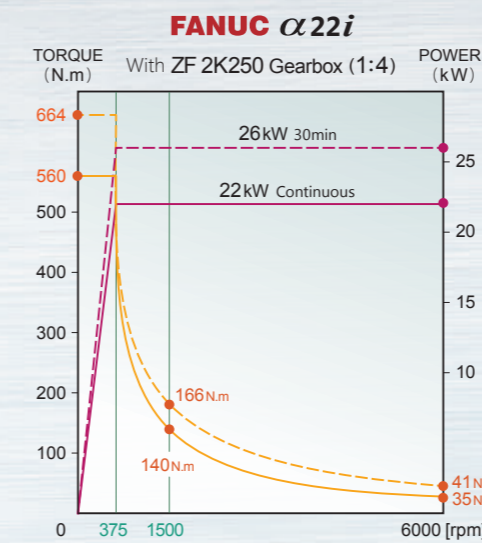


# SD SLIDING DOUBLE COLUMNS MACHINING CENTER

Item	Unit	SD-24	SD-28	SD-32	SD-36	SD-42	SD-48	SD-54	
Distance between columns (without splash guard)	mm	2450	2850	3250	3650	4250	4850	5450	
Floor Table	Length	6m ~ 36m Every 1m add							
	Width	1600	2000	2400	2800	3400	4000	4600	
T-slot	Width x Pitch	28 x 500							
Travel	X - axis	6m ~ 36m Every 1m add							
	Y - axis	2400	2800	3200	3600	4200	4800	5400	
	Z - axis	1100 (1400)				1100 (1400, 1500~2000)			
Spindle	Nose to table	1220 ~ 2320 (2620) according floor level							
	Center to column	427				473			
	Taper / Speed / Power	BT50 - 6000 - 22/26							
feedrate	X / Y / Z Cutting speed	5 ~ 6000							
	X / Y / Z Feed rate	10/10/12		8/10/12		8/8/12		6/8/10	
ATC & tool magazine	Capacity / Dia	32pcs / Max. dia Ø125 (full tools) ; Ø220 (Adjacent pocket empty)							
	Max tool weight / Length	20kg/400mm							
	Tool selection	Take shortest direction / M24 P3.0-45°							
Power / Pneumatic	KVA	60 ~ 100 KVA / 6.5 kg/cm <sup>2</sup>							
Maximum Table Load	Kg/m <sup>2</sup>	3000							
Machine size	Length	13.5m ~ 43.5m Every 1m add							
	Width	6.5	6.9	7.3	7.7	8.1	8.5	8.9	
	Height	6.5 (7.5)							
Machine Weight (app.)	ton	50+2/m	60+2/m	70+2.5/m	80+2.5/m	90+3/m	100+3/m	110+3.5/m	

All data will change based on the actual situation without notice.

## Power Capability



## Standard Accessories

1. FANUC 0iMD + 10.4" LCD
2. Spindle and Gear-box cooler
3. Spindle air blast
4. Cutting coolant system
5. Auto lubrication system
6. Rigid tapping
7. Electric cabinet heat exchanger
8. Program end alarm lamp
9. Ethernet / USB / RS-232 interface
10. ZF-2K250 H/L gearbox
11. Air / water cleaning equipment
12. Twin spirl type chip remover
13. Steel belt chip conveyor with cart
14. Operator / Maintain manual
15. X axis steel telescopic cover
16. Arm type ATC 32 tools magazine
17. ATC auto door
18. Working lamp
19. Foot switch for tool away
20. Mobile control room
21. X axis gear-rack syn-servo control (2pcs)
22. X axis with linear scales (2pcs)
23. Leveling screw + foundation bolt
24. Tool kit

## Optional Accessories

1. SDW Type (W travel 1m~2m)
2. Controller Siemens / Heidenhain
3. ZF 2K250 inline H/L gearbox
4. High speed spindle (for mold machining)
5. Wide range spindle (without gearbox)
6. 90° head (Auto, Semi, Manual)
7. Extend head (Auto, Manual)
8. AC swiveling head (Auto, Manual)
9. AHC system (for auto head)
10. Head stand (for semi / manual head)
11. Five face head (Fixed type)
12. Universal head (Fixed type, Manual)
13. Y axis steel telescopic cover
14. Tansformer
15. Y, Z axis linear scale
16. Tool length measurement
17. Auto work piece measurement
18. CNC rotary indexing / turning table
19. High pressure coolant thru spindle (CTS)
20. 30/37 kW + ZF 2K300 (4500rpm)
21. Heavy duty RAM 550x550 (above SD-36)
22. Heavy duty RAM 650x650 (above SD-42)
23. Z travel linear 1500~2000mm (above SD-36)
24. Spindle BT-60 (above SD-42)